REMARKS

Upon entry of this Amendment, claims 1, 6, 8-10, 23, 28-30 and 33 will be all the claims pending in the application. Claims 1, 6, 8, 23, 28 and 33 have been amended. Claims 2-5, 7, 11-22, 24-27, 31-32 and 34 have been canceled. Support for the amendments to the claims can be found through out the specification, and as further identified below.

No new matter has been added. Entry of the Amendment is respectfully requested.

I. Claim Objections

Claims 8, 9 and 23 are objected to by the Examiner as containing non-elected subject matter. Specifically, the Examiner asserts that variable B can only be pyrimidine by itself within the elected group. The Examiner asserts that the proviso of claim 8 contains non-elected compounds.

In response, independent claim 8 has been amended to delete rings other than pyrimidine in the definition of ring B.

Claims 9 and 23 depend from claim 8. Applicants respectfully submit that the objection of claims 9 and 23 are overcome by the amendment to independent claim 8.

Accordingly, Applicants respectfully request withdrawal of the objection to the claims.

II. Claim Rejections under 35 U.S.C. § 112

Claims 1, 6, 9, 10, 17, 28-30, and 33 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner states that in these claims, linker G between NH and ring J in variable Y is not clearly defined. According to the Examiner, a "spacer containing

1-3 atoms in the main chain" fails to define this variable. The Examiner also asks what substituents are intended for rings A and B and the hydrocarbon and heterocyclic groups for variable W and what hydrocarbon and heterocyclic groups are intended for variable W.

Without acquiescing the merits of the above rejection, claims 1, 6 and 33 have been amended, respectively, to further clearly point out the claimed subject matter.

In particular, claims 1 and 33 have been amended, respectively, to recite that G represents a bond or a methylene. Support for the amendment can be found in the specification, for example, at page 25, line 29.

Further, claims 1, 6 and 33 have been amended, respectively, to recite that ring J represents an azetidine, a pyrrolidine, a piperidine or a perhydroazepine which may be substituted with 1-5 of R^3. Support for the amendment can be found in the specification, for example, at page 26, lines 24-27.

Claims 1 and 33 have been amended by deleting the phrase "which may have a substituent(s)" with respect to ring A.

Claims 1, 6 and 33 have been amended, respectively, to limit substituents of ring B to be those described on page 23, lines 13-14 of the specification.

Claim 1, 6 and 33 have been amended, respectively, to recite that W represents hydrogen, a methyl, an ethyl, an isobutyl, a 3-methyl buthyl, a 2-ethylbutyl, a cyclohexylmethyl, a cyclohexyl, a cyclopentyl, a benzyl, a benzene, cyclohexanol, 1-(cyclohexylcarbonyl)piperidine, a tetrahydropyran-4-yl or a piperidine. Support for the amendment can be found in the Examples of

the specification.

In view of the above, withdrawal of the present §112, 2nd paragraph rejection is respectfully requested.

III. Claim Objections as Substantial Duplicates

Claim 17 is objected to under 37 C.F.R. §1.75 as being a substantial duplicate of claim 1. According to the Examiner, because the intended use in a compound claim has no patentable weight, claim 17 is considered a duplicate claim of claim 1.

Claims 19 and 23 are also objected to under 37 C.F.R. §1.75 as each being a substantial duplicate of claim 8 for the same reason.

Without acquiescing in the merits of the above objections, claims 17 and 19 have been canceled. The objections with regard to claims 17 and 19 are thus rendered moot.

Without acquiescing in the merits of the above objection to claim 23, claim 1 has been amended to recite a CXCR4 antagonist composition.

Accordingly, Applicants respectfully request withdrawal of the objection to the claim 23.

IV. Claim Rejections under 35 U.S.C. § 102

In paragraphs 10 and 11, claims 1, 6, 10, 17, and 19 are rejected under 35 U.S.C. §102(a) as being anticipated by Bilodeau *et al.* (U.S. Pub. No. 2002/0137755, published September 26, 2002).

According to the Examiner, Bilodeau *et al.* teaches compound 25-4 (page 38) and compositions comprising the same (claim 10, page 62), wherein variable A is 4-amino-azepane,

ring B is pyrimidine, variable G is a bond, and variable J is 5-cyano-1,3-thiazole. A 5-cyano-1,3-thiazole ring is a 5-membered nitrogen-containing ring.

Claims 1, 6, 10, 17, and 19 are further rejected under 35 U.S.C. §102(e) as being anticipated by Bilodeau *et al.* for the reasons set forth above in view of its benefit of priority to U.S. Prov. App. No. 60/251006, filed December 4, 2000.

Applicants respectfully traverse.

In particular, in claim 1, as amended, ring A is not substituted. Claim 1 presently recites that ring A represents an azepane ring. Further, claim 1, as amended, presently recites that ring J represents an azetidine, a pyrrolidine, a piperidine or a perhydroazepine which may be substituted with 1-5 of R^3.

Bilodeau fails to disclose or teach the compound as presently recited in claim 1.

Claims 6 and 10 depend from claim 1, and are distinguished over the cited reference for at least the same reason.

Claims 17 and 19 have been canceled, thereby rendering the rejection of those claims moot.

Accordingly, Applicants respectfully request withdrawal of the present §102 rejection.

IV. Claim Rejections under 35 U.S.C. § 103

Claim 8 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Bilodeau *et al.* The Examiner states that the pyrimidine rings of claim 8 and the pyrimidine ring of compound 25-4 of Bilodeau *et al.* are positional isomers. It is the Examiner's position that

because compound 25-4 of Bilodeau *et al.* is a positional isomer, and it would have been obvious to try compound 25-4 in the same method of use as in the instant application.

Applicants respectfully traverse. Bilodeau does not disclose, teach or suggest the compound as recited in the present claim 8.

Claim 8 presently recites that Q represents (1) NR^1R^2 wherein R^1 and R^2 each independently represents (i) hydrogen, (ii) C1-15 alkyl, C2-15 alkenyl or C2-15 alkynyl which may be substituted with 1 to 5 of R^{10}, (iii) a C3-8 carbocyclic group which may be substituted with 1 to 5 of R^3, or (iv) a 5- to 15-membered heterocyclic group which contains 1 or 2 nitrogen atoms, 1 or 2 oxygen atoms and/or one sulfur atom and which may be substituted 1 to 5 of R^3, or (2) ring C; and ring C represents a 4- to 15-membered heterocyclic group which is fully saturated and which contains at least one nitrogen atom and may further contain 1 or 2 nitrogen atoms, 1 or 2 oxygen atoms and/or one sulfur atom and which may be substituted with 1 to 5 of R^3.

In contrast, in Bilodeau, the moiety which corresponds to Q in formula (I-B) in the present application should necessarily be an unsaturated heterocyclic ring.

Additionally, the moiety in Bilodeau corresponding to ring B^B in the present application is different from ring B^B in the present application. Therefore, the compound in claim 8 of the present application and the compound 25-4 in Bilodeau are completely different.

Furthermore, Bilodeau relates to a tyrosine kinase inhibitor, namely, an inhibitor of an enzyme, while the present application relates to a CXCR4 antagonist, namely, a receptor antagonist. Therefore, since the function of the compounds in Bilodeau and the function of the

compounds in the present application are completely different and structures thereof are largely different, it would not have been obvious to one ordinary skilled in the art to expect that the compounds in the present application have CXCR4 antagonistic activity from the teachings of Bilodeau.

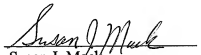
Accordingly, it is respectfully submitted that Bilodeau does not render obvious the claimed subject matter, and withdrawal of the present rejection of claim 8 under 35 U.S.C. § 103(a) is respectfully requested.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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